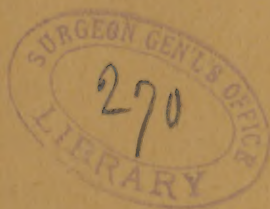


Winsey (W.)

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ON
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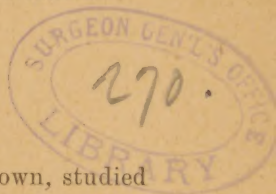
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SOME THOUGHTS ON PHTHISIS PULMONALIS.

BY WHITFIELD WINSEY, M. D.,
Of Baltimore.



Phthisis pulmonalis is a disease that has been known, studied and treated from the earliest times. That it was frequent among the Greeks is evident from the writings of Hippocrates (Syd. ed. Vol. 1). That it prevailed among the Romans, is also evident from the writings of Celsus, Aretaeus and Galen.

All sorts of theories have been entertained with regard to its etiology, pathology and treatment, and yet, to-day it is justly one of the most dreaded diseases, claiming as it does about one-ninth of those who die from all causes. So well recognized in its fatality, that to tell a man that he has consumption is like reading his death-warrant.

I do not pretend to offer anything new in this paper, but rather to inquire into the evidence as to whether or not the African mixed races, in whose blood there is a tinge of the African, are peculiarly susceptible to this disease. How far the same is inherent on the one hand, how far on the other; extrinsic causes contribute to the large mortality from this disease among all classes, but particularly among those of African descent.

That different races possess greater susceptibility or immunity with regard to certain diseases is as well recognized as almost any fact in medicine; and the greater immunity of the negro from zymotic diseases, while possessing greater susceptibility to pulmonary diseases, seems to be established almost beyond controversy.

No doubt the chief cause of this susceptibility is the change from his native climate to another, whether cold or temperate. Dr. Ansell, in his great work on tuberculosis, says: "There is no case in which the injurious effects of a change of climate appears to be more conclusive than in the negro race." Every writer on the subject has noted the same fact. His great susceptibility is most marked when placed under similar circumstances

with whites. For example: the negro troops serving with white ones in the West Indies, where the former fell in large numbers from the disease from which the latter were comparatively exempt.

Mr. Parsons, who has brought over so many African boys to London to be educated, deploras the fact that "they all die of consumption."

The change of the African to the West Indies, where the range of the thermometer is quite as high as at home, could not account for this high mortality without the presence of another factor, which is supplied by the humidity of the climate. Heat and moisture go hand-in-hand in this wholesale slaughter.

An interesting fact with regard to the power of climate is shown in the fact that the Europeans have persistently tried to live in the Valley of the Nile, but the emigrants have all died and left the country to its ancient inhabitants.

Romans and Visigoths lived in Africa for centuries by continually recruiting their ranks from Europe, and yet, except in the mountains, all traces of them have disappeared.

We think, however, that in the case of the negro, the superior knowledge of the present century will come to the rescue.

In support of the statement that heat and moisture are favoring conditions, Dr. Guilbert states that the large mortality on the coast of Peru and of the West Indies is directly due to this condition. In an elaborate report, prepared by Mr. Carter, our courteous and efficient Secretary to the Health Department, and to whom I am indebted for valuable assistance, he furnishes me facts, from which I perceive the following:

Mean Thermometer.	Mean Moisture.	Colored Mortality, from P.	White Mortality, from P.
98°	67.8	23.17	16.07
99°	67.1	21.37	16.17

while in a period of diminished humidity, though of high temperature, we find—

	Moisture.	Col. Deaths from P.	White Deaths from P.
101°	66.	18.09	11.05

Prof. Quantrofangs, in Pop. Sci. Mo., No. 2,551, says: "That the negro is not affected by emanations from swamps and marshes, but is more liable to tuberculosis. Yet," he continues, "all immunities and predispositions disappear with time. He noticed

- that in Barbadoes elephantiasis attacked only negroes till 1704, but since that time many white natives have become its victims, showing it to be a question of acclimation.

Under the heading, "Geography," Dr. Ancell says that nearly the whole of Africa is free from this disease; and as long ago as the time of Pliny, Egypt was exempt. He seldom saw it among the people of Abyssinia or Nubia, or along the West Coast, and in 124 deaths in this last locality, among British soldiers, not one was from tuberculosis. In St. Helena he found 3.2 in 1,000. In British Guinea, where nearly all the inhabitants are negroes, phthisis is unknown. In Mauritius, where there is a great variability of climate, many more men took the disease than in the British Isles, or on the Mediterranean. It is most fatal to negroes in Ceylon, where the climate is equable, but moist. Here the natives are but little affected, while the troops, all black, fall in large numbers. In Van Diemen's Land there is only one death from this disease in one hundred from all causes. In Lapland there is neither phthisis nor scrofula, but the Laplanders acquire both when they go to Denmark.

In the Madras army, sent into China, the deaths from phthisis became, in five years, five times as great as it had been in India. Finland youth, apprenticed in St. Petersburg, die in large numbers from this disease, though in this case other important elements no doubt contributed to the large mortality, prominent among which may be homesickness.

An interesting fact bearing upon this point of my subject is the exodus of negroes from the South to the West within the past few years. Animated by an idea of bettering their condition, their tone and vitality have been so preserved that, so far as I have observed, there has not been that great mortality among them that statistics show to exist in the large northern cities, although the climate in some of the new settlements has been found very severe. Louis, the Great Master, says: "All calculation in which the occupation, food, habits, etc., of the inhabitants are not duly considered may be regarded as negative." All the statistics bearing on the subject are interesting and instructive.

Dr. Mossell, of Philadelphia, has published in *The Alumni*, a quarterly issued in that city, an article entitled, "Excessive Mortality of Negroes living in Northern Cities." He shows an extremely high mortality among negroes from all causes, but

particularly from phthisis. The four cities, Boston, New York, Philadelphia and Baltimore, all give larger death-rates from this disease among the colored than the other portion of the population, being in the case of the negro $\frac{1}{3}$ greater. He shows, by the following table, that in 1884 Boston, with a colored population of 6,000, gave a death-rate of 42.10 to the 1,000 colored deaths, while that among the whites was 24.12. The per cent. from consumption alone among the—

Colored population was..... 22.22

And from pneumonia and bronchitis..... 13.79

While among the whites the per cent. from—

Consumption was..... 16.12

Pneumonia and bronchitis..... 12.89

A table for Philadelphia, covering a period of 23 years, from 1862–84, inclusive, shows an average—

Mortality among whites..... 22.41 per cent.

“ “ colored..... 37.29 “ “

Another table, covering a period of 10 years, from 1875–84, inclusive, shows an average mortality from—

Consumption among whites..... 14.

“ “ colored..... 18.

A table for New York, from 1867–84, shows average—

Total mortality among whites..... 26.78

“ “ “ colored..... 30.72

This shows also that the average mortality among the colored people of New York from all causes is smaller than in Philadelphia.

In another table for New York, from 1880–84, he found that the per cent. of deaths from zymotic diseases and consumption was as follows :

Zymotic disease, white..... .31

“ “ colored..... 18.8

Consumption, white..... 14.6

“ colored..... 21.5

Thus sustaining an average of about one-third greater mortality among the colored than the white population—as in Boston and in Philadelphia.

Coming nearer home, I again quote our own Secretary of Board of Health. In his report for 1885 he presents a table, which covers a period of 10 years, from 1875–84, which I append in full.

He shows the total mortality from all causes among the two races and the sexes separately :

Among the whites it was.....	13.3
“ colored “,	18.2
Another for 1885 alone shows—white.....	14.07
“ “ “ “ colored.....	20.78

MORTALITY IN BALTIMORE DURING TEN YEARS—1875-84.

ALL CAUSES.						CONSUMPTION.					
Year.	White males.	White females.	Colored males.	Colored females.	Totals.	Year.	White males.	White females.	Colored males.	Colored females.	Totals.
1875	2,878	2,872	739	769	7,258	1875	364	403	124	149	1,040
1876	2,879	2,720	974	875	7,268	1876	398	439	143	187	1,167
1877	2,969	3,090	838	1,013	7,910	1877	358	413	126	197	1,094
1878	2,556	2,603	716	858	6,733	1878	386	417	125	199	1,127
1879	2,790	2,913	851	884	7,618	1879	406	416	150	190	1,162
1880	3,180	2,990	888	985	8,043	1880	416	462	154	189	1,221
1881	3,402	3,317	1,008	1,089	8,816	1881	376	463	170	197	1,206
1882	3,606	3,272	1,007	1,038	8,923	1882	406	443	168	200	1,217
1883	3,659	3,466	1,078	1,177	9,380	1883	411	470	171	220	1,272
1884	3,340	3,058	906	989	8,293	1884	402	390	150	184	1,126
Tot.	31259	30301	9,005	9,677	80242	Tot.	3,923	4,316	1,481	1,912	11632

MORTALITY IN BALTIMORE FOR 1885.

	White males.	White females.	Col. males.	Col. females.
Total deaths.....	3,211	3,113	878	951
Consumption.....	430	458	192	190
Ratio of consumption to total mortality.....	13.38	14.71	21.87	19.87
			White.	Colored.
Total mortality			1,324	1,830
Consumption.....			898	382
Per centage.....			14.07	20.78
Total mortality, white and colored.....				8,154
“ consumption, “ “				1,280
Per centage.....				14.47

MORTALITY IN BALTIMORE FROM ALL CAUSES, AND PER CENT. OF CONSUMPTION TO TOTAL MORTALITY.

Year.		White males.	White females.	Colored males.	Colored females.	Totals.	TEMPERATURE.			Humidity, per cent.
							Mean.	Max.	Min.	
1875	Total mortality from all causes.....	2,878	2,872	739	769	7,258	53° 1	June 27. 97°	Jan. 10. 1° 5	66.9
	“ “ consumption.....	364	403	124	149	1,040				
	Ratio of mortality from consumption to total mortality.....	12.65	13.99	16.78	19.37	14.33				
1876	Total mortality from all causes.....	2,879	2,720	974	875	7,268	54° 9	July 9. 99°	Dec. 10. 1°	67.1
	“ “ consumption.....	398	439	143	187	1,167				
	Ratio of mortality from consumption to total mortality.....	13.82	16.17	18.13	21.37	16.05				
1877	Total mortality from all causes.....	2,969	3,090	838	1,013	7,910	56° 3	June 26. 95°	Jan. 5. 1°	68.4
	“ “ consumption.....	358	413	126	197	1,094				
	Ratio of mortality from consumption to total mortality.....	12.05	13.36	15.06	19.44	13.83				
1878	Total mortality from all causes.....	2,556	2,603	716	858	6,733	56° 9	July 19. 98°	Jan. 8. 6°	67.8
	“ “ consumption.....	386	417	125	199	1,127				
	Ratio of mortality from consumption to total mortality.....	15.10	16.02	16.06	23.17	16.73				
1879	Total mortality from all causes.....	2,790	2,913	851	884	7,618	55° 6	July 16. 99°	Jan. 3. 0	65.8
	“ “ consumption.....	406	416	150	190	1,162				
	Ratio of mortality from consumption to total mortality.....	13.67	17.02	17.63	21.49	15.20				

1880	{ Total mortality from all causes.....	3,180	2,990	888	985	8,043	56° 7	July 13. 99°	Dec. 30. 3° below zero.	64.6
	“ “ consumption.....	416	462	154	189	1,221				
	Ratio of mortality from consumption to total mortality.....	13.06	15.45	17.34	19.18	15.18				
1881	{ Total mortality from all causes.....	3,420	3,317	1,008	1,089	8,816	57° 1	Sept. 7. 101°	Jan. 1. 6° below zero.	66.0
	“ “ consumption.....	376	463	170	197	1,206				
	Ratio of mortality from consumption to total mortality.....	11.05	13.95	16.86	18.09	13.68				
1882	{ Total mortality from all causes.....	3,606	3,272	1,007	1,038	8,923	55° 7	June 25. 97°	Jan. 24. 7°	67.9
	“ “ consumption.....	406	443	168	200	1,217				
	Ratio of mortality from consumption to total mortality.....	11.25	13.53	16.68	19.27	13.64				
1883	{ Total mortality from all causes.....	3,659	3,466	1,078	1,177	9,380	55° 1	July 23. 96°	Jan. 23. 11°	66.4
	“ “ consumption.....	411	470	171	220	1,272				
	Ratio of mortality from consumption to total mortality.....	11.26	13.56	16.02	18.69	13.35				
1884	{ Total mortality from all causes.....	3,340	3,058	906	989	8,293	56° 2	July 24. 94° 8	Jan. 6. 8°	64.7
	“ “ consumption.....	402	390	150	184	1,126				
	Ratio of mortality from consumption to total mortality.....	12.04	12.75	15.78	18.75	13.57				
	Total mortality for 10 years from all causes....	31259	30301	9,005	9,677	80242				
	“ “ “ consumption.....	3,923	4,316	1,481	1,912	11632				
	Ratio of mortality from consumption to total mortality.....	12.55	14.24	16.37	19.77	14.48				

A. R. CARTER,

Secretary Health Department.

A little higher in 1885 than in the preceding 10 years, but making the ratio between the two races about the same—one-third greater in the colored than in the white.

How much of this is due to inherent weakness, to climate, to occupation and hygienic influences must be considered *sub judice*. The U. S. Census Mortality Report for 1884, says: "An important question is how far the excessive mortality among the colored population is due directly to race characteristics—that is to less vital force? or to the fact that the great mass of these people are poor and ignorant, live in the midst of unhealthy surroundings, in the dampest and dirtiest parts of the city, have poor food and are in other respects unusually exposed to well-organized causes of death? If we could separate the vital statistics of the poor and ignorant whites, the tenement-house population of our northern cities from those of the whole white returns, we should undoubtedly find a high rate of death in this class, especially in infancy and childhood."

The authorities that we have quoted show the negro to have come from a climate that made but little demand upon his respiratory organs, and his simple pastoral life under the old régime was not such as to fit him even under more favorable circumstances for the high-pressure mode of living peculiar to all large American cities. Had the large numbers who flocked to the cities, particularly those of the North, continued life upon the farm, we might not have been confronted with this large mortality, which undeniably exists among them.

Another unfavorable element has been the cramming system practiced in the schools. The evil effect of this upon all classes, in retarding physical development and well-being, is happily receiving the attention that it loudly calls for. The bad effect upon the negro could hardly have been expected to be less in view of other conditions.

In thus expressing myself, I do not desire to be understood as depreciating the value of true education, but that the eternal fitness of things should be considered here, as in the other relations of life, and that the methods of teaching, as well as the amount attempted, should be suited to the individual in his condition in life and his opportunities for usefulness.

Wendell Phillips, in speaking upon the modes practiced in New England, says: "Most of the graduates from the schools can do

nothing to earn a dollar. They cannot write a decent letter, nor read aloud a newspaper: but over-educated they find themselves unable to earn a living according to their taste. Thus they are led into temptation and vice." Perhaps in the case of the negro we can give the same cause with this effect—*despondency and disease*.

In Boston the climate is particularly trying to all who have any predisposition to lung disease, irrespective of race. Baltimore is next to Boston in the number of cases among colored people, but right here we can largely explain the fact, for so many of the people work in the oyster and packing houses, continually surrounded by dampness and filth, and are required to go to work between three and four in the morning, during the most trying and unhealthful season of the year.

The crowded and unsanitary condition of small and badly arranged houses in the lanes and alleys where large numbers of these people live, their ignorance of the most elementary laws of health, often their enforced idleness, owing to the few avenues in which they can find steady employment and living wages, all combine to make the lot of the negro in our large cities like that of the policeman in the Pirates of Penzance, "not a happy one."

Having demonstrated by facts and figures that consumption is a formidable enemy to mankind in general, and to those of African descent in particular, the question naturally arises, how may we best combat it?

To name and describe one-half of the drugs and methods proposed and vaunted for its cure would require volumes, but in the present state of our knowledge we have much more to hope for in prophylaxis than in cure. If the bacillus theory of Koch, as a specific agent, is to stand, our efforts should be directed to prevent the propagation and spread of this morbid agent.

The late lamented Dr. Flint, in *The American System of Medicine*, says: "The doctrine that phthisis depends on the presence of a special micro-organism is to be considered as probably established. Assuming it to be demonstrated that the disease involves a specific agent, and that this agent is proven to be a contagion by its capabilities of producing the disease when introduced into a healthy body, the conclusion as to the communicability is not to

be shaken by the lack of corroborative clinical evidence, or by inability to explain certain facts which seem to be inconsistent with that conclusion. Having accepted a demonstrated truth, the endeavor should be to reconcile therewith facts which do not sustain it, and which appear to be opposed to it." And again :

"The development and continuance of phthisis involve two factors: the presence of the parasite and the existence of those unknown conditions constituting the tuberculous predisposition or cachexia, usually developed independent of any antecedent affection of the lung. That a congenital predisposition exists in certain cases is to be inferred from the number of cases that often occur in one family."

All of this suggests the importance of separating as far as possible those affected with phthisis from others immediately around them in the closer relations of families. As physicians in contact with our patients, especially the poor and ignorant, it should be our constant endeavor to disseminate some slight knowledge of hygiene. We should constantly remind them that living in damp and overcrowded houses, in the midst of filth, is a most fruitful cause of the large mortality among them, particularly in infancy and childhood; that it is oftener man's providence than God's providence by which whole families are swept out of existence.

To cope with any formidable evil, we must go to the root of the matter. So here we may hope to do much by physically strengthening the young and avoiding the tendency to over-educating the masses, or perhaps I might more properly say, avoid cramming the head with useless knowledge at the expense of the balance of the body.

Dr. Renebaugh read an essay before the Social Science Association of Philadelphia, February, 1879, in which he said: "Let hand culture go side by side with head culture, as I am confident that without it we are deteriorating morally, physically, intellectually."

In Hampton Institute they are carrying on this work of industrial education among negroes and Indians. The literary training is of a very moderate degree, but every boy and girl is taught a trade, as well as all sorts of useful employment.

Our own manual training-school is carrying out this idea, with the difference that it is open to white boys only. This is also true of the McDonough school.

As great as have been the achievements of preventive medicine within the past, it no doubt has greater triumphs awaiting it; and should it place phthisis pulmonalis in the category of preventable diseases, such as small-pox, yellow-fever, cholera, etc., the boon to living and unborn millions will be great indeed.

